with a 5-year secondary success rate of 91 ± 2%. Of the 279 patients, 26 (9.3%) undergoing imaging FU benefitted from the yearly CT scans, since they had re-interventions based on asymptomatic imaging findings: AAA diameter expansion with or without endoleaks ($n = 18$), kink in the stent-graft limbs ($n = 4$), endoleak type III due to stent-graft limb separation without simultaneous AAA expansion ($n = 2$), isolated common iliac artery expansion ($n = 1$) and superior mesenteric artery malperfusion due to partial coverage by the stent-graft fabric ($n = 1$).

Conclusions: Less than 10% of the patients benefit from the yearly CT-FU after EVAR. Only one re-intervention due to partial coverage of a branch by the stent-graft would have been delayed if routine FU had been based on simple diameter measurements and plain abdominal radiograph. This suggests that less-frequent CT is sufficient in the majority of patients, which may simplify the FU protocol, reduce radiation exposure and the total costs of EVAR. Contrast-enhanced CT scans continue, nevertheless, to be critical when re-interventions are planned.

Combined Primary Subintimal and Endoluminal Angioplasty for Ischaemic Inferior-limb Ulcers in Diabetic Patients: 5-year Practice in a Multidisciplinary 'Diabetic-Foot' Service

Alexandrescu V., Hubermont G., Philips Y., Guillaumie B., Ngongang Ch., Coessens V., Vandenbossche P., Coulon M., Ledent G., Donnay J.-C. Eur J Vasc Endovasc Surg 2009;xx:xx-xx.

Introduction: This study aims to assess the patency, the clinical success and the limb-salvage rates of combined subintimal (SA) coupled to endoluminal angioplasty (EA) as the initial treatment of ischaemic inferior-limb ulcers in diabetic patients and to study the influence of other concurrent factors in the tissue-healing process.

Materials and method: Since September 2002 until December 2007, a consecutive series of 176 limbs with manifold ischaemic wounds in 161 diabetic patients were treated by associated multilevel angioplasties in a multidisciplinary 'diabetic-foot team' (a third-line diabetic-care institution integrating two departmental hospitals). There were 98 associated SA with EA procedures, 26 re-vascularisations by single SA technique and 52 others including selective multilevel EAs that were retrospectively reviewed. The mean follow-up period was 22.1 months (in the range of 1–50 months) by clinical and duplex evaluation (every 6 months).

Results: The initial technical success was noted in 149 limbs (84%). For the single or associated SA procedures, 102 of 124 procedures were successful (82%) and 145 of 150 of the miscellaneous EAs (96%) evinced an equally favourable outcome. The 27 initially failed endovascular procedures (22 SA and five EA) required 16 surgical re-vascularisation, eight adjuvant endovascular procedures besides three amputations. A total of 21 secondary and five tertiary angioplasties were equally necessary during the entire follow-up period of these patients. The 30-day survival rate was 99% (one patient died from myocardial infarction). In a intention-to-treat analysis, the cumulative primary and secondary patencies at 12, 24, 36 and 48 months were 62%, 45%, 41% and 38%, together with 80%, 69%, 66% and 66%, respectively. The aggregate clinical success rates at the same intervals were 86%, 77%, 70% and 69%, while the corresponding limb-salvage proportions showed 89%, 83%, 80% and 80%, respectively. The primary patency was negatively affected at 1 and 4 years by the length of the occluded segment (>10 cm) and the end-stage renal disease (ESRD) ($p < 0.0001$). The limb-salvage rates were unfavourably influenced at the same periods by the extent of tissue defects (>3 cm), the ESRD and the presence of osteomyelitis. In addition, at 4 years, the age (>70 years), the accompanying peripheral neuropathy, the bedridden status and the presence of cardiac failure (left ventricular ejection fraction (LVEF) < 30%) appeared equally as negative predictors ($p < 0.0001$) for wound healing and limb rescue.

Conclusion: Primary angioplasty represents a low aggressive and efficacious method to improve the healing process in diabetic ischaemic ulcers. However, beyond appropriate re-vascularisation, even repetitive if necessary, achieving satisfactory limb-salvage rates probably implies a multidisciplinary control of the presenting risk factors for wound healing as well.

Dacron or ePTFE for Femoro-popliteal Above-Knee Bypass Grafting: Short- and Long-term Results of a Multicentre Randomised Trial

van Det R.J., Vriens B.H.R., van der Palen J., Geelkerken R.H. Eur J Vasc Endovasc Surg 2009;xx:xx-xx.

Objectives: To compare expanded polytetrafluoroethylene (ePTFE) prosthesis and collagen-impregnated knitted polyester (Dacron) for above-knee (AK) femoro-popliteal bypass grafts.

Design: A prospective multicentre randomised clinical trial.

Patients and Methods: Between 1992 and 1996, 228 AK femoro-popliteal bypass grafts were randomly allocated to either an ePTFE ($n = 114$) or a Dacron ($n = 114$) vascular graft (6 mm in diameter). Patients were eligible for inclusion if presenting with disabling claudication, rest pain or tissue loss.

Follow-up was performed and included clinical examination and duplex ultrasonography at all scheduled intervals. All patients were treated with warfarin.

The main end-point of this study was primary patency of the bypass graft at 2, 5 and 10 years after implantation. Secondary end-points were mortality, primary assisted patency and secondary patency. Cumulative patency rates were calculated with life-table analysis and with log-rank test.

Results: After 5 years, the primary, primary assisted and secondary patency rates were 36% (confidence interval (CI): 26–46%), 46% (CI: 36–56%) and 51% (CI: 41–61%) for ePTFE and 52% (CI: 42–62%) ($p = 0.04$), 66% (CI: 56–76%) ($p = 0.01$) and 70% (CI: 60–80%) ($p = 0.01$) for Dacron, respectively. After ten years these rates were respectively 28% (CI:18-38%), 31% (CI:19-43%) and 35% (CI: 23-47%) for ePTFE and 28% (CI: 18-38%), 49% (CI: 37-61%) and 49% (CI: 37-61%) for Dacron.

Conclusion: During prolonged follow-up (10 years), Dacron femoro-popliteal bypass grafts have superior patency compared to those of ePTFE grafts. Dacron is the graft material of choice if the saphenous vein is not available.

Implementation of Endovenous Laser Ablation for Varicose Veins in a Large Community Hospital: The First 400 Procedures

van den Bremer J., Hedeman Joosten P.Ph.A., Hamming J.F., Moll F.L. Eur J Vasc Endovasc Surg 2009;xx:xx-xx.

Endovenous laser ablation (ELA) has become a standard treatment of the incompetent great saphenous vein (GSV). Our prospective audit examines the implementation of this new method in a large community hospital with special attention to obstacles, technical results, pain scores, failures and our learning curve.

Methods: Three hundred and twenty-three patients (403 limbs) with incompetence of the GSV underwent ELA. Patients were assessed by clinical examination and venous duplex ultrasound was performed 6 weeks after operation. Visual analog scale (VAS) pain scores of the first postoperative week were recorded. Operative time and success rate were analysed.

Results: After 6 weeks, 301 (74.7%) treated legs were examined by duplex ultrasound imaging. Successful complete occlusion was present in 282 (93.7%) GSVs. Partial occlusion was present in 12 (4.0%) GSVs. In seven (2.3%) limbs the GSV was not occluded. The maximum mean VAS pain score was noted on the 5th postoperative day. From the start of this series, the operation time decreased rapidly for each surgeon, stabilising after 15 limbs.

Conclusion: ELA of the incompetent GSV is effective and safe. ELA is simple to perform, well accepted by patients and relatively atraumatic. In our opinion, ELA can be easily implemented in surgical practice.